

REMARKS

Claims 1 and 4 have been canceled without prejudice or disclaimer. Claims 2, 3 and 5 have been amended. Claims 6-9 have been newly added. No new matter has been added. Accordingly, claims 2, 3 and 5-9 are now pending in this application.

Claim Objections

Claim 2 was objected to because of a minor formality. Claim 2 has been amended to overcome the objection.

Claim Rejections under 35 U.S.C. §101

Claim 5 was rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. In response, claim 5 has been amended to recite that the program is retained in a storage medium and is executable by a CPU.

Claim Rejections under 35 U.S.C. §102

Claims 1-5 were rejected under 35 U.S.C. §102(a) as being anticipated by Kitamura et al. (Kitamura), U.S. Patent Publication No. 20020091828. These rejections are traversed as follows.

In the Office Action, it is asserted that Kitamura, at paragraph [0039], discloses the last two clauses of original claim 2, "wherein said CPU reads volume management information owned by said disk storage to form logical volume configuration information and said memory holds the logical volume configuration information, and

wherein said management computer can access information extracted from the volume management information based on said logical volume configuration information.”

However, the full text of paragraph [0039] reads: “The control memory 223 is used to store therein a program to be executed by the processor 221 or to store therein data for management of the logical device or devices formed as a combination or combinations of the disk units 21.”

Thus, paragraph [0039] of Kitamura suggests storing data for management of a logical device or devices in a disk controller, in a broad sense. However, this appears to be all that Kitamura discloses that is relevant to the claims of the present application. Kitamura does not teach that a CPU reads volume management information owned by said disk storage, as set forth in original claim 2. Nor does Kitamura teach that logical volume configuration information is formed from this, as also set forth in original claim 2. Nor does Kitamura teach that the memory holds the logical volume configuration information wherein a management computer can access information extracted from the volume management information based on said logical volume configuration information. Accordingly, Kitamura fails to show or suggest virtually all of the novel features of original claim 2, and thus, the rejection under 35 USC § 102 fails.

The object of the present invention is to provide a computer system which can alleviate loads imposed to a host computer and a network when information for management of a storage of a disk subsystem is collected, to thereby allow efficient access to the storage (see, e.g., page 3, lines 9-14 of the specification). Applicants'

invention specifies a computer-implemented software-installed agent, provided in the disk subsystem, for collecting logical volume management data (information) stored in disk units to provide a SVP with the collected logical volume management information for availability by a management host via a LAN.

More specifically, the agent 700 in the disk subsystem includes a computer-executed agent for performing resource supervision, which includes collecting volume management information of volumes installed in the disk subsystem, the volume management information including volume designation information (300) for designating a volume which delivers management information, volume configuration information (400) describing a method for referencing the volume, and a supervisory program (600). Based on the volume designation information (300) and the volume configuration information (400), the supervisory program (600) delivers the volume management information to a volume management information extracted data area (500) of the SVP (1000), which is available to a management computer (100) from the SVP via a LAN (1200). (See, e.g., page 6, line 19, through page 7, line 17, of the specification.)

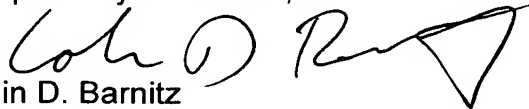
In order to more clearly indicate to the examiner the patentable features of the invention, the claims have been amended. Thus, Kitamura does not teach or suggest the specific configuration of this invention, as set forth in the claims. In particular, Kitamura fails to show or suggest, at a minimum, a program for performing disk storage resource supervision, as set forth in claims 2 and 3, or a management program for managing volumes of a disk subsystem, as set forth in claim 5.

Additionally, Kitamura does not teach collecting volume management information and creating logical volume configuration information, as set forth in claim 2. Further, Kitamura does not teach or suggest reading volume management information or forming logical volume configuration information from said volume management information, as set forth in claims 3 and 5. Numerous other patentable distinctions may also be drawn between the pending independent claims and Kitamura. Accordingly, independent claims 2, 3 and 5 are patentable over Kitamura and the other art of record, whether taken singly, or in combination. Claims 6-9 are dependent claims directed to additional patentable features of the invention, and are patentable at least because they depend from allowable base claims.

Conclusion

In view of the foregoing, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,



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